

REMARKS

Claims 8-11 and 16-22 are pending in the application. Claims 21 and 22 are newly added. Reconsideration of this application is respectfully requested.

The Office Action rejects claims 8-11, 16-18 and 20 under 35 U.S.C 103(a) as unpatentable over French Patent No. 2,705,766 to Sylvain, hereafter Sylvain, in view of United Kingdom Patent No. 2,349,458 to Thorneywork, hereafter Thorneywork, and German Patent No. 4,139,904 to Kummer, hereafter Kummer.

The Examiner's contention is summed up in paragraph 5 of the Office Action as follows:

"Specifically, the rejection is one based on design choice in the absence of criticality. While applicant alleges criticality in the Remarks, there is no mention of equivalent passages in the specification as originally filed. Accordingly, the alleged criticality appears to be an afterthought".

A rejection based on "a matter of design choice" was considered in the case of *In re Chu*, 36 USPQ 2d 1089 (Fed. Cir. 1995). The Federal Circuit in reversing the rejection, stated:

"We have found no cases supporting the position that a patent applicant's evidence and/or arguments traversing a § 103 rejection must be contained within the specification. There is no logical support for such a proposition as well, given that obviousness is determined by the totality of the record including, in some instances most significantly, the evidence and arguments proffered during the give and take of ex parte prosecution".

In other words, the arguments and advantages of Applicant's claimed invention set forth in the Amendment must be considered and not treated as an "afterthought".

As noted in the Amendment filed on October 13, 2006, the claimed invention has several advantages that are not suggested or apparent from Sylvain, Kummer or Thorneywork.

As to the combination of Sylvain and Kummer, the Examiner admits that Sylvain does not disclose the following recitation of independent claim 17:

"a baffle plate supported in said cooking chamber to define a cooking area and a fan area so that a space is provided between at least two opposite edges of said baffle plate and said chamber walls, said baffle plate comprising a plurality of perforations".

The Examiner contends that Kummer discloses the claimed baffle arrangement and that the claimed arrangement "is an obvious modification based on design choice". The Examiner then concludes that "in view of the absence of criticality for this particular design, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this arrangement, at least as taught by Kummer, into the invention disclosed by Sylvain, as a matter of design choice".

This contention and conclusion are erroneous. The Examiner has acknowledged Applicant's "alleged criticality", but ignores it as an "afterthought" because it does not appear in the specification. As noted above, the Examiner must consider Applicant's arguments including the advantages of the claimed invention, whether or not the advantages are in the original specification. In re Chu, *infra*.

The claimed baffle arrangement cannot be considered in a vacuum, but must be considered in the totality of all the elements and limitations recited in independent claim 17. Independent claim 17 further recites that the catalytic converter and grease filter are mounted to an upstream face of the baffle plate such that cooking byproducts entrained in the air in the cooking area are substantially removed before the air exits the cooking area and do not contaminate the fan or other parts of the fan area. This provides important advantages. First, as recited in independent claim 17, the cooking byproducts do not enter the fan area and do not contaminate the fan blades or other parts of the fan area. Second, the grease filter and catalytic converter, being mounted internally of the cooking area, can be easily reached through the oven door and removed for cleaning and/or maintenance. This can be done quickly without disassembly of the cooking chamber. Because the fan and fan area are not subjected to the entrained food byproducts, they do not need as frequent service as the easily removable grease filter and catalytic converter. These advantages are noted in the original specification at page 3, lines 18-21 and 25 to page 4, line 7.

In contrast, Kummer's catalytic converter is located in the fan area about the periphery of the fan. The air that enters the fan area from the cooking area is entrained with cooking byproducts that contaminate the fan and other parts of the fan area before being filtered by the catalytic converter. This requires frequent cleanings, which can only be done by disassembling the fan area. The time required to do this is down time of the oven. In contrast, the oven of the present is down for only short periods of time to clean the cooking area and the easily removable grease filter and catalytic converter.

There is no evidence of record to combine Sylvain and Kummer in the manner suggested by the Examiner. One of ordinary skill in the art confronted by Sylvain and Kummer is presented with a choice of Sylvain's oven or Kummer's oven. The Examiner's suggestion of using only a part (the baffle arrangement) of

Kummer's oven in place of a part (baffle arrangement) of Sylvain's oven is not taught in either Sylvain or Kummer. In fact, the suggested combination of Sylvain and Kummer changes the operation, function and purpose of Sylvain, which in itself is evidence that one of ordinary skill in the art would not combine Sylvain and Kummer as suggested by the Examiner. Sylvain discloses a convection oven that has a dual purpose of an improved elimination of the toxic gases and smoke produced by the combustion of fats and the discharge of the completely oxidized products of the combustion from the oven. See page 3, lines 9-12, of the English translation of Sylvain. To accomplish the improved elimination of the toxic gas and smoke, Sylvain uses a catalytic converter 20 disposed in an opening 17 of a back wall 16 of the muffle 3. A fan 13 is disposed behind back wall 16 to take in air from muffle 3 via catalytic converter 20. Catalytic converter 20 transforms the airflow by oxidation. Fan 13 circulates the transformed airflow back to muffle 3 via openings 28 in back wall 16.

To accomplish the discharge of the oxidized byproducts of the catalytic transformation, Sylvain uses a chimney 7 disposed centrally of the top wall of muffle 3 (see Fig. 1) and a distribution of openings 28 in back wall 16 into groups according to the four cardinal points around the central axis 29 of catalytic converter 20. This distribution provides a specific airflow in muffle 3 that is well below the top wall of muffle 3 so that there is a space between the airflow and the top wall of muffle 3. This results in air turbulence in this space that allows the discharge of the oxidized byproducts from muffle 3 via chimney 7.

In contrast, Kummer's fan 3 returns oxidized airflow to muffle 1 around the edges of back wall 3 of muffle 1. This airflow is adjacent the top wall of Kummer's muffle 1. That is, the airflow sweeps across the top wall. If Kummer's wall were used in Sylvain's design, the airflow along the top of the muffle would sweep oxidized byproducts along the top wall of muffle 3 and away from chimney 7. This would result in no discharge of the oxidized byproducts from Sylvain's muffle 3. Therefore, it is submitted that one of ordinary skill in the art would not

choose to make the suggested modification because of the elimination of the by-product discharge from Sylvain's muffler 3.

Thus, the suggested combination of Sylvain and Kummer dramatically changes the operation and function of Sylvain. In addition, the above noted significant advantages of the claimed invention refute the "design choice" contentions of the Examiner as to the suggested combination of Sylvain and Kummer.

As to the combination of Sylvain and Kummer with Thorneywork, the Examiner admits that Sylvain does not disclose the following recitation of independent claim 17:

"a catalytic converter mounted to an upstream face of said baffle plate to cover all of said perforations;
a grease filter mounted on an upstream side of said catalytic converter".

The Examiner contends that it would have been obvious to provide Sylvain with a grease filter mounted on an upstream side of a catalytic converter for the purpose of removing any large particles of grease from the air before the air reaches the catalytic converter as taught by Thorneywork. The Examiner further contends that "the mounting of the grease filter and/or the catalytic converter in the recited manner appears to be a matter of design choice obvious to one of ordinary skill in the art at the time the invention was made".

This contention and conclusion are erroneous. The Examiner has acknowledged Applicant's "alleged criticality", but ignores it as an "afterthought" because it does not appear in the specification. As noted above, the Examiner must consider Applicant's arguments including the advantages of the claimed

invention, whether or not the advantages are in the original specification. In re Chu, infra.

The claimed grease filter and catalytic converter recital cannot be considered in a vacuum, but must be considered in the totality of all the elements and limitations of independent claim 17. Independent claim 17 further recites;

“wherein cooking byproducts entrained in the air in said cooking area are substantially removed by said grease filter and said catalytic converter before the air exits said cooking area via said perforations and do not contaminate said fan”.

Thorneywork discloses a grease filter and catalytic converter that are mounted externally of the cooking area in a ductwork leading to the fan. Thus, the combination of Sylvain and Thorneywork in the manner taught by Thorneywork results in the grease filter and catalytic converter being mounted externally of the cooking area in a ductwork leading to the fan. In contrast, independent claim 17 recites that the grease filter and the catalytic converter are mounted to the upstream face of the baffle plate, i.e., internally of the cooking area. This provides important advantages. First, as recited in independent claim 17, the cooking byproducts do not enter the fan area and do not contaminate the fan blades or other parts of the fan area. Second, the grease filter and catalytic converter, being mounted internally of the cooking area, can be easily reached through the oven door and removed for cleaning and/or maintenance. This can be done quickly without disassembly of the cooking chamber. A further advantage is that the recited combination of the grease filter and catalytic converter is ideally suited for retrofitting to existing ovens. These advantages are noted in the original specification at page 3, lines 18-21 and 25 to page 4, line 15. Therefore, the above noted significant advantages of the claimed invention refute the ‘design choice’ contention of the Examiner as to the suggested combination of Sylvain, Kummer and Thorneywork.

The Examiner further contends with respect to the recital of the mounting of the catalytic converter and grease filter that the obviousness of the "design choice" is "reinforced by applicant's previously claiming various locations and the lack of disclosure for these locations". This contention is without merit because Applicant's specification and claims were unavailable to one of ordinary skill in the art at the time the invention was made and, therefore, cannot be evidence of the prior art.

Sylvain's assignee is in the business of selling ovens to household consumers and not to eating establishments, such as restaurants and other entities that cook food for patrons. As a result, it is unobvious to one of ordinary skill in the art of household ovens to add a grease filter or change the baffle arrangement of Sylvain's oven.

It is submitted that Examiner's contentions of obviousness based on design choice are refuted by the above noted significant advantages of the claimed invention as well as above noted lack of evidence to make the combination as suggested by the Examiner.

The rejection is erroneous because there is no motivation for one skilled in the art to modify Sylvain in the manner suggested by the Examiner. In fact, the suggestion to use Sylvain in combination with Thorneywork and Kummer is improperly based on the hindsight of Applicants' disclosure. Such hindsight reconstruction of the art cannot be the basis of a rejection under 35 U.S.C. 103. The prior art itself must suggest that modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 USPQ 2d 1397, 1398-1399 (CAFC, 1989). "The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made." Sensonics Inc. v. Aerosonic Corp. 38 USPQ 2d 1551, 1554 (CAFC, 1996), citing

Interconnect Planning Corp. v. Feil, 774 F. 2d 1132, 1138, 227 USPQ 543, 547 (CAFC, 1985).

In particular, the Examiner concludes that it is obvious to one of ordinary skill in the art to modify Sylvain's back wall 16 with Kummer's back wall 3. The Examiner does not provide any motivation for one of skill in the art to make this modification. It is submitted for the reason set forth below that there is no motivation.

One reason for lack of motivation is that there is no evidence of record to combine Sylvain and Kummer in the manner suggested by the Examiner. One of skill in the art confronted by Sylvain and Kummer is presented with a choice of Sylvain's oven or Kummer's oven. The Examiner's suggestion of using only a part (the baffle arrangement) of Kummer's oven in place of a part (baffle arrangement) of Sylvain's oven is not taught in either Sylvain or Kummer. There is no evidence of record that supports the Examiner's suggested combination other than Applicant's disclosure. It is impermissible to base a conclusion of obviousness on an Applicant's disclosure. This is hindsight, which cannot be used to support motivation.

Another reason for lack of motivation is that the combination of Sylvain and Kummer changes the operation, function and purpose of Sylvain. Sylvain discloses a convection oven that has a dual purpose of an improved elimination of the toxic gases and smoke produced by the combustion of fats and the discharge of the completely oxidized products of the combustion from the oven. See page 3, lines 9-12, of the English translation of Sylvain. To accomplish the improved elimination of the toxic gas and smoke, Sylvain uses a catalytic converter 20 disposed in an opening 17 of a back wall 16 of the muffle 3. A fan 13 is disposed behind back wall 16 to take in air from muffle 3 via catalytic converter 20. Catalytic converter 20 transforms the airflow by oxidation. Fan 13

circulates the transformed airflow back to muffle 3 via openings 28 in back wall 16.

To accomplish the discharge of the oxidized byproducts of the catalytic transformation, Sylvain uses a chimney 7 disposed centrally of the top wall of muffle 3 (see Fig. 1) and a distribution of openings 28 in back wall 16 into groups according to the four cardinal points around the central axis 29 of catalytic converter 20. This distribution provides a specific airflow in muffle 3 that is well below the top wall of muffle 3 so that there is a space between the airflow and the top wall of muffle 3. This results in air turbulence in this space that allows the discharge of the oxidized byproducts from muffle 3 via chimney 7.

In contrast, Kummer's fan 3 returns oxidized airflow to muffle 1 around the edges of back wall 3 of muffle 1. This airflow is adjacent the top wall of Kummer's muffle 1. That is, the airflow sweeps across the top wall. If Kummer's wall were used in Sylvain's design, the airflow along the top of the muffle would sweep oxidized byproducts along the top wall of muffle 3 and away from chimney 7. This would result in no discharge of the oxidized byproducts from Sylvain's muffle 3.

Moreover, the sweeping action of the airflow would create a negative pressure (Venturi effect) on the muffle side of chimney 7, which would result in a sucking action of air from ambient via collection space 12 and chimney 7 into muffle 3. This would also seriously affect the temperature of the airflow and the cooking of food.

Thus, the modification suggested by the Examiner would render the Sylvain's oven ineffective for its intended purpose of discharge of the oxidized byproducts via chimney 7 or would change the operation of Sylvain as there would be no discharge. In either case, this is tantamount to no suggestion or motivation to make the proposed modification. See MPEP, 2143.01 V and VI.

For the reasons set forth above, it is submitted that the rejection of claims 8-11, 16-18 and 20 under 35 U.S.C. 103(a) is erroneous and should be withdrawn.

The Office Action rejects claim 18 under 35 U.S.C 103(a) as unpatentable over Sylvain, hereafter Sylvain, in view of Thorneywork and Kummer. Based on the discussion in paragraph 4 of the Office Action, it is assumed that the Examiner intended to reject claim 19 and not claim 18.

This rejection is erroneous for the reasons set forth in the discussion of independent claim 17 upon which claim 19 is dependent.

For the reason set forth above, it is submitted that the rejection of claim 18 under 35 U.S.C. 103(a) is erroneous and should be withdrawn.

Newly presented claim 21 recites an oven that comprises:

"a retrofit assembly mounted on a side of said baffle plate that faces said cooking area in a manner that covers all of said perforations, said retrofit assembly comprising a catalytic converter having first and second opposed surfaces and a grease filter mounted on said first surface of said catalytic converter, wherein said second surface of said catalytic converter faces said perforations".

Newly presented claim 22 recites a method of retrofitting an oven for the reduction of smoke and cooking by-products, the method comprising:

"affixing a retrofit assembly to said baffle plate so as to cover all of said perforations, wherein said retrofit assembly comprises a catalytic converter having first and second opposed surfaces and a grease filter

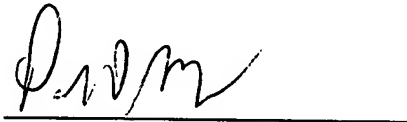
mounted on said first surface of said catalytic converter, wherein said second surface of said catalytic converter faces said perforations>

Support for new claims 21 and 22 is found in the specification at page 3, line 32 to page 4, line 15. Neither Sylvain, Kummer nor Thorneywork disclose or teach an oven comprising the claimed retrofit assembly or a method for retrofitting an oven as claimed. Therefore, new claims 21 and 22 are distinguished from Sylvain, Kummer and Thorneywork, taken separately or in combination.

It is respectfully requested for the reasons set forth above that the rejection under 35 U.S.C. 103(a) be withdrawn, that claims 8-11 and 16-22 be allowed and that this application be passed to issue.

Respectfully Submitted,

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